Response Template for the Detection of Aerosolized B. anthracis by a Biohazard Detection System (BDS) in Virginia United States Postal Service Processing & Distribution Centers

Reference: Centers for Disease Control and Prevention. Responding to detection of aerosolized *Bacillus anthracis* by autonomous detection systems in the workplace. MMWR 2004;53(No. RR-7):1-11.

This document was prepared by the Virginia Department of Health to identify guidelines and state level actions to protect the health of individuals potentially exposed to *B. anthracis*. This should be used as a guide for local health districts in developing response plans to BDS alerts.

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Glossary of Terms

Response Template for the Detection of Aerosolized <u>B. anthracis</u> by a Biohazard Detection System (BDS) in Virginia

United States Postal Service (USPS) Processing & Distribution Centers (PDC)

I. Introduction

The risk of terrorism events involving the intentional airborne release of infectious biologic agents has led to the development of novel technologic approaches to the sampling and testing of ambient air. One such approach is the use of a Biohazard Detection System (BDS) that combines both automated air sampling with an internal, automated testing system. A BDS continuously samples air that impinges into a buffer solution. An automated polymerase chain reaction (PCR) test is run on the trapped material at a defined sampling interval (e.g., 1.5 hours) and includes a thirty-minute analysis period. In the event of a positive PCR test resulting in a "positive BDS signal," an automated alert emanates from the device as a sound, a light or other signal/notification device. The result is a near-real time detection system. The USPS will install BDS devices on or near key equipment that processes incoming mail such as Advanced Facer-Canceler System (AFCS) machines. Other mail handling facilities within Virginia may also use BDS systems. Identification of aerosolized *B. anthracis* spores in an air sample affords an opportunity to initiate prompt on-site decontamination of workers, prophylaxis before the onset of symptoms, and interruption of continued flow of contaminated letters into postal streams.

Bacillus anthracis is one of the most likely biological agents to be used as a weapon because 1) its spores are highly stable, 2) the spores can infect via the respiratory route, and 3) the resulting inhalation disease has a high mortality rate. The recent cases of anthrax that occurred after *B. anthracis* spores were distributed through the U.S. mail have underscored the potential dangers of this organism as a bioterrorism threat. Future systems may be developed to detect other biological agents determined to be a threat.

Primary and secondary aerosols of *B. anthracis* spores are important considerations in bioterrorist acts involving deliberate release of *B. anthracis*. Primary aerosols result from the initial release of the agent. Secondary aerosols result from agitation of the particles that have settled after the primary release. As demonstrated in the outbreak of 2001, the clinical and epidemiologic presentations of an intentional release will vary based on the population targeted, the characteristics of the agent, and the mode and/or source of exposure.

A. Coordinating Agencies

Preparing for and responding to the detection of *B. anthracis* by a BDS unit must involve jointly planning responses with community resources who would be partners during an actual event, and should include drills and exercises that involve these partners.

The agencies listed below are responsible for coordinating emergency response activities at USPS PDCs in Virginia. Planning, preparedness and coordinated response efforts among these agencies is necessary to ensure that the appropriate actions are taken to protect the workers, public and emergency responders from potential exposures.

Federal

- o United States Postal Service (USPS)
- o United States Postal Inspection Service (USPIS)
- USPIS Hazardous Waste Operations Response (HAZWOPERs) team
- o Federal Bureau of Investigation (FBI)
- Department of Homeland Security (DHS)
- o Centers for Disease Control and Prevention (CDC)
- o Environmental Protection Agency (EPA)

State

- Virginia Department of Health (VDH)
- o Virginia Department of Emergency Management (VDEM)
- Virginia's Division of Consolidated Laboratory Services (DCLS)
- o Virginia State Police (VSP)
- o Virginia's Department of Environmental Quality (DEQ)

Local

- Local Health Districts
- o Law Enforcement
- o Local/County Hazmat/EMS
- o Fire Service

B. Pre-Event Planning

As part of the emergency response planning process, this plan includes recommendations for activities that should be conducted prior to an event and should assist with the establishment of locality-specific policies and procedures. Also included are templates for developing site-specific annexes for each PDC. The USPS shall conduct an orientation with the federal, state and local emergency response stakeholders to familiarize them with the USPS site, the established system, and policies and procedures for evacuation and decontamination. Evacuation planning (including routes of egress, rally (muster) points and accountability measures) is an essential part of pre-event planning.

The plan includes a detailed outline of community agency's responsibilities and responses to both positive BDS signals and confirmatory results of positive BDS samples, environmental sampling, laboratory specimen collection and transport policies and procedures, personal decontamination recommendations, prophylaxis dispensing site locations and security, and communications. VDH and the local health districts shall review the plan with each USPS PDC to ensure an understanding of each agencies roles and responsibilities.

As an additional part of pre-event planning, the USPS should review tasks and operations to pre-identify those employees and employee functions that are likely to result in a

higher concentration of deposited spores due to direct contact with equipment likely to be associated with anthrax aerosolization.

Local health districts should work closely with USPS facilities operating BDS systems to provide education and training to USPS staff. At a minimum, the local health department should collect and review the following information to assist with response efforts (Attachment 1):

- Contact persons and numbers for the facility, including the plant manager, BDS coordinator, safety unit contact, public affairs representative and medical unit contact;
- Number of BDS units operating in the facility
- Facility floor plan/site plan of the facility with location of BDS units
- Hours of operation for BDS equipment;
- Number of employees working in the facility, by shift (including shift times);
- Approximate number of individuals predetermined to be at higher risk of exposure due to direct physical contact with aerosolgenerating equipment;
- Hours of operation open to public with approximate number of post office customers per day, including customer use of post office boxes and vending machines (as appropriate for facilities with retail operations);
- Approximate number of visitors per day to the facility (includes tours, and visitors from other facilities);
- Number of contractors operating from facility, with approximate times for delivery and pick-up.
- List of upstream and downstream facilities (mail flow).

II. Emergency Response Measures

A. Policies and Procedures for Notification

In the event of a positive BDS signal at a USPS PDC, the first level of notification should be made immediately at the local level through the 911 system. Additional notifications shall be to the designated federal, state and other local agencies to assist with the emergency response activities, with notification protocol being clearly established. The Emergency Phone Contact List (Attachment 2) identifies all USPS key personnel, federal, state and local emergency contact information (both work and off-hour contact information). Contact information for each agency should include a primary method of contact available 24 hours per day, seven days per week and at least one back-up number to ensure timely notification. Notification of VDH should occur through the Epidemiology Emergency Phone at 1-866-820-9611. This is not a public number and should not be widely disseminated. A notification tree/checklist (Figure 1) is included to ensure that all parties are contacted appropriately

Key contact personnel shall have two alternate methods of contact (e.g., Blackberry, cellular telephone and/or pager) to facilitate communications in the event of a positive BDS signal. Each local health district should maintain and regularly update contact information.

B. Evacuation/Immediate Response

In the event of a positive BDS signal the USPS PDC shall follow their Integrated Emergency Management Plan, which at a minimum should include:

- Stopping work activities immediately;
- Stopping and securing any potentially aerosol-generating equipment to minimize the extent of contamination;
- Shutting off HVAC units serving the production/processing area;
- Evacuating personnel to safe locations;
- Notifying local and federal law enforcement officials and public health officials.
- Accounting for all workers to ensure that everyone has been evacuated:
- Organizing employees, contractor and visitors into the CDC identified exposure groups, separating Groups 1, 2 and 3 (refer to page 10), and providing this information to Hazmat and public health as appropriate;
- Gathering personal identification and contact information, including location in facility prior to evacuation and during the sampling and testing period (e.g., 1.5 hours). This involves ensuring completion of Epidemiologic Information forms; and
- Providing basic information to employees regarding subsequent activities, including but not limited to decontamination, subsequent laboratory testing and prophylaxis (Employee handout and USPS Stand-up Talk, Attachments 4 & 7).

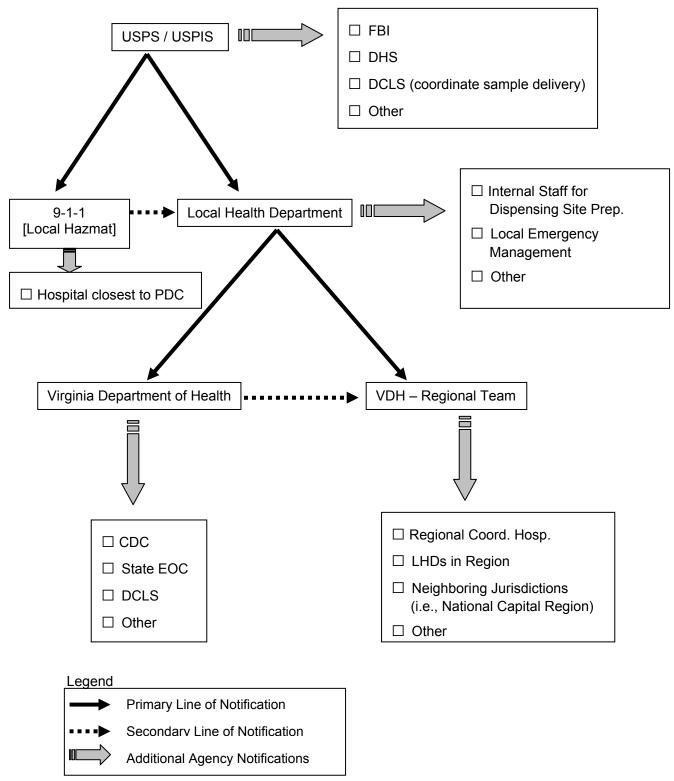
C. Security

The USPIS is responsible for coordinating security issues with local law enforcement agencies prior to the installation of the BDS units. At the time of an event, this shall include but not be limited to:

- Perimeter security (both inner and outer)
- Access control to prevent re-entry into the facility
- Street closures/traffic control (if necessary)

Providing security and access control during prophylaxis and vaccination clinics must also be considered.

Figure 1. Notification Tree Following Positive BDS Signal at Postal Facility



Note: This tree serves as a starting point and is not meant to identify all parties that need to be notified in an event. The emergency contact list (Attachment 2) can be supplemented with additional information

D. Identification and Management of Potentially Exposed Individuals

Those present in the production/processing area where a BDS unit is in use are confronted with three important exposure pathways of concern. Because inhalational anthrax has a high mortality rate, aerosolization is the most important pathway. A second exposure pathway of concern is direct contamination of skin and outer layers of clothing as well as workplace surfaces. This could occur for workers who might directly contact contaminated machine surfaces. It might also affect other production workers in close proximity to aerosol-generating equipment, to include the "010 area", and the Advanced Facer-Canceler System (AFCS), the Delivery Bar Code Sorter (DBCS) and the Optical Character Reader (OCR) areas due to settling out of spores onto skin and clothing. The potential for contamination of these employees could put them at risk for both inhalational and cutaneous anthrax. The third exposure pathway of concern involves contaminated clothing and exposed skin serving as a pathway for contamination of a vehicle or home, leading to the potential for subsequent exposures outside of the USPS PDC. While limited information is available about the extent and likelihood of risk from off-site contamination; during the 2001 anthrax outbreak, the risk of disease appeared minimal.

• Decontamination Pre-Planning

It is the responsibility of the USPS PDC to maintain and continually update a list of all employees (including contact information) within the facility. They must also pre-identify three groups of personal exposure based on workplace settings and proximity to the potential contaminated mail pathways. Each exposure group triggers a different level of decontamination.

These groups (or levels) of personal decontamination will include:

Group 1	Workers who did not enter the production area containing
	the BDS device during the sampling and testing period
	(e.g., 1.5 hours) before the positive BDS signal and whose
	work location does not share a heating, ventilating, and air
	conditioning (HVAC) system with the production area
	experiencing the positive signal.
Group 2	All workers who were present in the production area
	containing the BDS device during the sampling and testing
	period before the positive BDS signal or who were located
	in any space that shares an HVAC system with the
	production area experiencing the positive signal.
Group 3	Workers identified in advance as particularly at high risk of
	exposure to a higher concentration of deposited spores as a
	result of direct physical contact with aerosol-generating
	equipment.

The approximate number of individuals in each group, by shift, should be provided to local Hazmat and the local health district prior to an event (Attachment 3). This information will be used as a guideline to assist local agencies in planning. It shall be noted that those individuals in the building at the time of an alert may fall into a different group based on their work location and function during the sampling period (e.g., up to 1.5 hours prior to the positive BDS signal). Additionally, the USPS PDC shall maintain and update a list of employees, by shift and with contact information, which will be located outside of the main production area to ensure that their records can be accessed in the event of a workplace evacuation. This information should be made available to local Hazmat and the local health district at the time of an event. Following a BDS evacuation, the USPS will provide information about the alerting BDS machine, confirm the group assignment of each individual and provide this information to local Hazmat. Each employee should be aware of his/her final, on-scene group assignment that has been based on information directly related to the BDS signal. A system should also be in place to ensure that newly hired employees are assigned to a personal decontamination group during the orientation process. The USPS will provide information with basic decontamination instructions to employees and facility visitors following evacuation (Attachment 4)

The USPS PDC shall also notify local law enforcement, Hazmat and the local health department of all known contractors and visitors identified to have been in the facility during the sampling period (e.g., up to 1.5 hours prior to the positive BDS signal). This information shall include the individuals' names, contact information and location within the facility, if known.

Primary and secondary (in the event the primary sites are unavailable for any reason) evacuation locations must be pre-identified for each of the personal decontamination groups and shall take into consideration air handling systems, washing accommodations and potential environmental factors such as extreme weather conditions. Pre-identified evacuation locations should be provided to local Hazmat. Individuals in Group 1 should be evacuated by pathways and to places of refuge separate from Groups 2 and 3. Keeping all three groups separate is optimal.

USPS management shall be responsible for ensuring that appropriate arrangements are in place with local health/Hazmat to facilitate decontamination of Group 2 and Group 3 exposed individuals, and employees in Group 1 desiring decontamination procedures. The USPS shall ensure provision of disposable replacement outer garments which should be pre-staged outside of the main production area for easy access during an event. An additional agreement shall exist to facilitate decontamination of all emergency response entry personnel (e.g., USPIS HAZWOPERs) and their corresponding samples so that they may be safely transported to DCLS.

Appropriate personal protective equipment (PPE) to be worn by emergency response personnel entering the facility shall be determined by the Hazmat unit.

• Personal Decontamination Recommendations

An aerosolization event can result in deposition of spores on the outerwear of individuals and subsequent transport off-site. Personal decontamination is intended to minimize the risk of off-site contamination and to prevent cutaneous anthrax. The risk to other individuals associated with such off-site transport is very low. Nevertheless, because of gaps in knowledge regarding this theoretical risk, in the event of a positive signal from a BDS, the Centers for Disease Control and Prevention (CDC) currently recommends a very conservative approach to personal decontamination. While approximately 70%-95% of decontamination can be accomplished by removing outer clothing and shoes, it is also important to wash exposed skin, including any exposed jewelry (e.g., rings, bracelets, necklaces, or wristwatches) or glasses. Those persons thought to be at risk of substantially higher levels of contamination (Group 3) as a result of direct physical contact with aerosol-generating equipment are candidates for the higher degree of on-site decontamination afforded by showers. Contamination of inner clothing layers is not likely. However, those employees in Group 3 may contaminate skin as clothing is removed, requiring showering to clean unexposed skin. Upon arriving home, workers who did not wash their hair on-site, can shower and wash hair to further reduce any contamination concerns.

The following levels of decontamination, based on categories of worker exposure, will minimize/prevent off-site transport of *B. anthracis* spores.

Guidelines for Personal Decontamination after a positive BDS signal

	Worker exposure	Decontamination Procedure
Group 1	Individuals who did not enter	Evacuate; no special decontamination steps
	the production/processing area	are needed.
	containing the BDS device	
	during the sampling and	
	testing period (e.g. up to 1.5	
	hours prior to a positive BDS	
	signal) and who were not in an	
	area that shares a heating,	
	ventilating, and air	
	conditioning (HVAC) system	
	with the production area	
	experiencing the positive	
	signal.	

	Worker exposure	Decontamination Procedure
Group 2	Worker exposure All other individuals who were present in the production/processing area containing the BDS device during the sampling and testing period before the BDS signal or who were in an area that shares an HVAC system with the production area experiencing the positive signal.	 Decontamination Procedure Immediate evacuation to designated area specific to Group 2 individuals. Remove potentially contaminated outer garments (does not include undergarments as <i>B. anthracis</i> spores do not penetrate clothing). The outer clothing that is removed shall be carefully bagged, identified and left at the facility pending laboratory confirmation of the presence of <i>B. anthracis</i>. Wash all areas of exposed skin (e.g., face, arms, hands, legs) with mild soap and copious amounts of water. Washing of exposed skin should also include washing of any exposed jewelry (e.g., rings, bracelets, necklaces, or wristwatches) or glasses. Redress using pre-staged replacement (disposable) outer garments and shoes.
		5. Upon arrival at home, shower and wash hair.
Group 3	Individuals identified in advance as particularly at risk of exposure to a higher concentration of deposited spores as a result of direct physical contact with aerosolgenerating equipment.	 Immediate evacuation to designated area specific to Group 3 individuals. Remove potentially contaminated outer garments (does not include undergarments as <i>B. anthracis</i> spores do not penetrate clothing). The outer clothing that is removed shall be carefully bagged, identified and left at the facility pending laboratory confirmation of the presence of <i>B. anthracis</i>. Other personal items (e.g., cell phones, wallets, keys, jewelry such as rings, bracelets, or necklaces along with wristwatches) shall be placed in plastic bags and carried with the individual through the decontamination process. Take a shower at the site to wash all areas of exposed skin and unexposed skin with mild soap and warm water. Redress using pre-staged replacement (disposable) outer garments, and shoes. Upon arrival at home, shower and wash hair.

E. Environmental Sampling

The initial focus will be to ensure that the appropriate samples (cartridge and filters) from the alerting BDS unit are transported to DCLS for subsequent confirmatory testing (PCR and culture). The USPIS Hazardous Waste Operations Response (HAZWOPERs) team will be responsible for the immediate notification, collection and transportation of the alerting BDS cartridge to DCLS in Richmond, VA. The HAZWOPERs, specially trained teams of four, will be dispatched from various locations after being contacted by the onsite USPIS agent. The time until the team arrives and enters the facility may be up to 4 hours. Following cartridge retrieval, samples will be transported to Richmond by the fastest possible means, as determined by the USPIS.

At the latest, after the notification of a DCLS PCR positive result confirming the positive BDS signal, the facility may be considered a federal crime scene and the FBI and USPIS will have complete jurisdiction. Additional environmental and forensic sampling should commence immediately. The FBI and USPIS may convene a joint team including VDH, VDEM and VSP (and/or local law enforcement) personnel to perform the following tasks:

- Plan and conduct sampling of those areas of the facility accessed by the general public to identify any additional potentially exposed individuals (if appropriate). Sample collection will be done by the FBI/USPIS and/or a USPS contractor, with samples being sent to either DCLS or another Laboratory Response Network (LRN) laboratory contracted for environmental testing. Results will be shared with appropriate partners, including public health and DCLS, as soon as they are available;
- Begin activities to locate and recover the source of contamination;
- Follow the contamination pathway both downstream and upstream to help with the timely identification of other facilities and individuals that may have been affected;
- Assist in determining the physical extent of contamination of the facility and begin efforts to characterize the degree of contamination.

The forensic and environmental sampling will take place after the facility has been evacuated and potentially contaminated individuals at the USPS PDC have been processed. At this time, it would be prudent to have the local, state and federal assets organized so that the community-based first responders can be released from the scene. The joint sampling team would manage the incident from the forensic process and environmental sampling to the subsequent transfer of samples to DCLS or another LRN laboratory. In addition to trained response personnel, VDEM has the equipment necessary to set up a decontamination operations facility that could remain on site through the duration of the forensic investigation and environmental sampling process. There is also the ability to draw on county resources and the state emergency services contractor personnel.

Planning for environmental sampling prior to activation of the BDS system at a facility is necessary to ensure that:

- Appropriately trained and protected personnel are identified and available to conduct sampling and search the facility for a suspect letter or package;
- Response personnel are certified in the use of personal protective equipment and personal decontamination before entering the facility;
- Appropriate equipment and sampling supplies are available;
- Pre-event notification and response protocols are established for receipt and rapid processing of samples;
- Targeted sampling plans are developed for the production/processing area and the public areas, including pre-identified locations to maximize the likelihood of finding contamination and to expedite results. (See Attachments 5 & 6);
- Sampling plans take into consideration other locations through which the item setting off the signal might have passed and whether sampling is needed in other facilities to make appropriate post-exposure prophylaxis recommendations for personnel at those sites;
- Sampling should employ methods such as wet wipes that maximize sensitivity and allow larger areas to be sampled.

Plans for remediation of the facility will be the responsibility of the USPS with assistance from EPA and other federal agencies. The USPS, in conjunction with federal agencies, will determine when it is appropriate for work operations to resume at the facility.

F. Prophylaxis Dispensing Sites

Post-exposure prophylaxis shall be initiated as soon as possible following potential exposure to *B. anthracis*. Preparation for post-exposure prophylaxis will begin immediately following notification of a positive BDS signal. VDH and the local health districts are responsible for setting up dispensing sites for anthrax post-exposure prophylaxis (Attachment 5). After a positive BDS signal, the BDS cartridge will be tested at DCLS using LRN PCR and culture methods. Following a DCLS PCR positive result, post-exposure prophylaxis will be started, ideally within 15 hours after the onset of the collection period that yielded the positive signal. A five-day regimen of antibiotic postexposure prophylaxis will be provided for logistical reasons to allow sufficient time for culture results and antimicrobial susceptibility testing. This time period is longer than the three days recommended in the CDC guidance document. The State Epidemiologist, in consultation with the CDC, will determine the appropriate antibiotic for postexposure prophylaxis. CDC states that ciprofloxacin and doxycylcine both are considered first-line agents since it is equally easy to induce resistance to B. anthracis to either antibiotic. The postexposure plan can be modified, if necessary, after results of antimicrobial susceptibility testing are available. Following culture confirmation of B. anthracis, the duration of antibiotic therapy will be extended to 60 days and a 3-dose regimen of

vaccine will be available to persons exposed to culture-confirmed *B. anthracis* spores. Currently, the available anthrax vaccine, BioThraxTM [BioPort Corporation, Lansing, Michigan], is not licensed for postexposure prophylaxis, for use as a 3-dose postexposure regimen, or for use in children. If the vaccine is released for use in an emergency situation, CDC will provide the necessary Investigational New Drug (IND) protocol for delivery and use in collaboration with state and/or local health departments. These two postexposure methods (antibiotics and vaccine) are provided to ensure: 1) adequate levels of antibiotics in the bloodstream to kill the bacteria, and 2) adequate anti-*B. antracis* antibodies in the bloodstream for long duration protection.

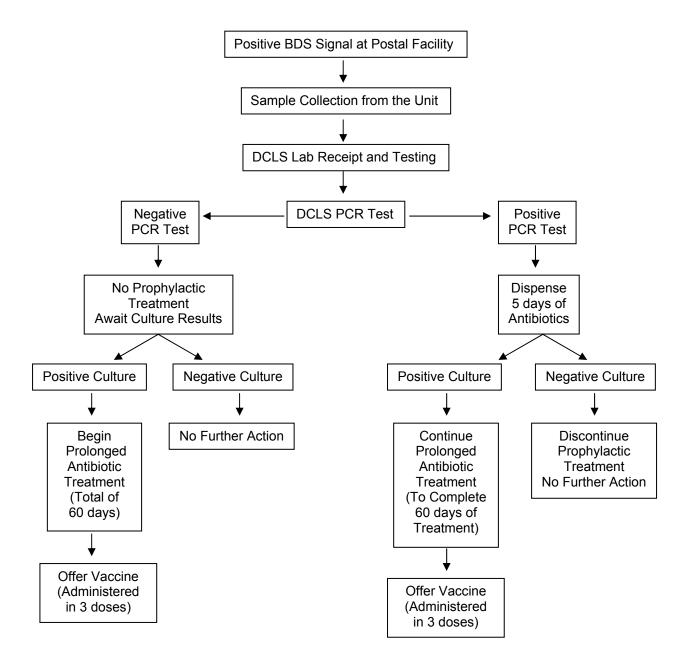
PCR test results will most likely be available before culture results. In the unlikely event of a PCR negative result followed by a positive culture result, 60 days of antibiotic post-exposure prophylaxis should begin immediately.

Post-exposure prophylaxis options are based on a series of test results as follows (Figure 2):

- Positive DCLS laboratory PCR result five day course of prophylactic antibiotics is initiated;
- Negative DCLS laboratory PCR result no post-exposure prophylaxis and await culture results;
- Negative DCLS laboratory culture (after positive DCLS laboratory PCR result) – antibiotic prophylaxis is discontinued;
- Positive DCLS laboratory culture 60-day course of antibiotics/3dose regimen of anthrax vaccine offered in accordance with IND protocols.

Antibiotic postexposure prophylaxis for USPS employees and contractors will be planned and coordinated with the PDC. Individuals in exposure groups 2 and 3 must undergo decontamination (on-site or at home) prior to entry into a postexposure antibiotic dispensing site. For those PDCs that have lobbies with retail operations and boxes, customers who were in the facility the during the exposure period (e.g., 1.5 hours prior to alert) will be offered PEP under the same guidelines as postal employees. Customers in the PDC at the time of the alert and evacuation will receive the same information, education and decon (if appropriate) as employees working in that area of the facility. The immediate, on-site education will be the responsibility of the USPS.

Figure 2. Prophylaxis Decision Tree



G. Public Health Laboratory

After a positive BDS signal at a postal facility, DCLS will be immediately notified by the USPIS through the DCLS Emergency Operator (Attachment 6). USPIS will coordinate transport of the BDS cartridge to DCLS, ensuring that the cartridge remains upright and that Chain of Custody is maintained.

After receipt of the BDS cartridge at DCLS, DCLS will perform the LRN PCR assay, reporting results within 4 hrs. Results will be simultaneously communicated to the USPIS, VDH designee, and the affected district's Health Director or designee. Positive results also will be reported to appropriate partners. VDH will be notified immediately so that decisions can be made about prophylaxis. Concurrent with PCR testing, samples will be placed in culture and *B. anthracis* results will be available within 72 hours. After identification of *B. anthracis* isolates, DCLS and/or CDC will perform sensitivity testing so that susceptibility to antibiotics can be determined.

The FBI and/or USPIS will determine if DCLS will process samples from subsequent environmental testing. If a laboratory other than DCLS is used for this testing, results will be communicated with VDH and DCLS as appropriate.

III. Responsibilities

Listed below are major responsibilities for the primary agencies involved in responding to the BDS detection of *B. anthracis*, in addition to other activities outlined or implied in this document. All agencies involved in response efforts have the responsibility to participate in planning activities and ensuring that they prepared. Many of the activities listed below require involvement and coordination of multiple agencies, but are listed under the agency with the primary responsibility for ensuring that the activity is accomplished.

USPS PDC

Pre-Event

- Train employees:
 - o Prepare/provide pre-event educational materials for employees, contractors and visitors
 - Prepare/provide educational handouts for use during an event for employees, contractors and visitors to address possible concerns
- Identify evacuation areas:
 - Primary sites for individuals in all three groups of Worker Exposure
 - Secondary sites (in the event primary site is not usable) for individuals in all three tiers of Worker Exposure
 - o If outdoor sites are selected, ensure that individuals are sheltered from extreme weather conditions

- Establish immediate response protocols, including procedures for shutting down the facility (including HVAC systems) and buildings connected to the main processing plant
- Identify Group 2 and Group 3 individuals based on work positions
- Identify locations for decontamination of Group 2 and Group 3 individuals. Establish procedures and arrangements with local first responders to decontaminate potentially exposed employees
- Identify and pre-position equipment needed for the decontamination process, including redress clothing
- Acquire plastic bags for storage of potentially contaminated outer clothing and shoes as it is removed
- Acquire plastic bags for personal items (e.g. cell phones, wallets);
- Provide identification system for bags with clothing and personal items
- Acquire/purchase replacement/redress clothing and footwear. Store in an accessible location outside of potentially contaminated areas
- Ensure availability of soap and water for washing (e.g., locker rooms/bathrooms) of exposed skin areas
- Ensure privacy, as appropriate, during undressing, clean-up and redressing
- Establish crisis communication plans, including communication channels, preplanned messages for employees and the media, and information regarding postexposure prophylaxis dispensing sites
- Develop policies and procedures to identify and communicate with those employees who left the facility during the sampling period (e.g., up to 1.5 hours prior to a positive BDS signal)
- Develop a system to notify employees of Hazmat and health department recommendations following an alert
- Develop procedures to notify local emergency, law enforcement and public health authorities
- Develop policies and procedures in cooperation with local health department to address prophylaxis dispensing site schedule that prioritizes and allows for staggered arrival times for exposed personnel (Attachment 7) (e.g., 500 potentially exposed individuals are provided dispensing site appointments to allow for a minimum of 50 individuals to present each half hour at the designated dispensing site)
- Identify two locations appropriate for post-exposure prophylaxis dispensing sites, with the assistance of the LHD, and provide emergency contact information for those sites. At a minimum, dispensing site space should:
 - o Allow for easy access
 - o Provide sufficient parking
 - o Be large enough for multiple stations
 - Include tables and chairs
 - o Have restrooms available
 - Provide a separate entrance and exit

Post-Event

- Call 9-1-1 and local health district emergency contact
- Provide a roster of all employees generally working during the involved shift(s), to include name and phone number, to local health department
- Provide lists to local law enforcement, health department and Hazmat personnel of those contractors and visitors who were within the facility during the sampling period (e.g., up to 1.5 hours prior to a positive BDS signal)
- Disseminate, ensure the completion of and collect the USPS Epidemiology Data Collection Form after evacuation and decontamination
- Ensure that appropriate USPS employees and contractors are granted access to health department post-exposure prophylaxis dispensing sites
- Assist law enforcement in efforts to identify contaminated mail/source of exposure

Hazmat/EMS

Post-Event

- Establish decontamination lines for decontamination of Group 2 and Group 3 individuals and Group 1 individuals desiring decontamination
- Provide on-site emergency care and/or transport if needed
- Establish decontamination lines for decontamination of postal inspectors/entry teams and their corresponding samples
- Ensure appropriate personal protective equipment (PPE) use during the decontamination process
- Maintain list of people undergoing decontamination for local health district

Local Health District

Pre-Event

- Ensure that planning includes:
 - Identification of two dispensing site sites (in case primary site is unavailable for any reason) for distribution of prophylactic antibiotics and vaccine (Attachment 5)
 - Identification and training of staff for dispensing site operations, including the need for staff from other districts if needed (mutual aid)
 - Provide contact information for further questions and/or concerns

- Contact VDH (central office through the Epi Emergency phone and/or regional team)
- Open dispensing site:

- Preparation/set-up of dispensing site operation should begin immediately following a positive BDS signal (not waiting for DCLS PCR positive result)
- Dispensing site operations should be initiated within 15 hours after onset of the collection period that yielded the BDS positive signal
- o VDH will assist with repackaging of medications to provide five (5)-day supply for all individuals
- Maintain aggregate information regarding the number of employees and public receiving postexposure prophylaxis for the USPS and other interested parties
- Trace contractors and visitors who were identified by USPS PDC as having been in the facility during the 1.5 hours prior to the positive BDS alarm. Provide information regarding appropriate personal decontamination of individuals
- Monitor health status of exposed USPS employees (e.g., for adverse events to prophylaxis or vaccine and for development of disease)
- Provide information to USPS employees, contractors and the public (risk communication) with contact information for further questions and/or concerns
- Coordinate with USPS to educate and train employees develop and distribute information to employees

Law Enforcement

Post-Event

- Provide perimeter site security
- Coordinate with county-level personnel (e.g., emergency management staff, counterterrorism staff)
- Provide security at post-exposure prophylaxis dispensing sites

USPIS

- Secure the facility
- Contact DCLS to coordinate sample delivery
- Retrieve appropriate canister and any corresponding samples from BDS machine
- Transport and deliver upright cartridge to DCLS in Richmond
- Provide or coordinate security at the antibiotic dispensing site
- Develop additional sampling plans with the FBI in consultation with VDH. The actual collecting of samples will be accomplished in accordance with established procedures that will address public safety concerns and ensure the sanctity of the crime scene

VDEM

Post-Event

- Provide trained/equipped Hazmat Specialist-Level Responders to assist in render-safe procedures, monitoring, field-testing, forensics, and sampling (in conjunction with DCLS and VSP)
- Provide technical assistance with respect to site safety, personnel protection and decontamination
- Provide representation to Unified Incident Command (if activated)
- Provide the appropriate level of decontamination for responders during the operation. This can range from simple wash-down arrangements to a fully enclosed, heated shelter decon unit with wastewater containment

VDH Central Office/Regional Team

Pre-Event

- Provide planning guidance for local health districts
- Coordinate response planning and activities with other state and federal agencies
- Develop educational material/handouts for use pre- or post-event, including:
 - o Signs and symptoms of disease (Attachment 8)
 - o Adverse reactions associated with post-exposure antibiotics and/or vaccine (Attachment 9)
 - o Postexposure prophylaxis dispensing site registration form (Attachment 10)

- Contact State Emergency Management and CDC
- Notify Regional Coordinating Hospital and other health districts in the region
- Coordinate activities with local health departments
- Coordinate with DCLS for receipt and rapid processing of sample
- Determine the appropriate antibiotic to use for post-exposure prophylaxis
- Coordinate public health response activities with CDC, including the request for anthrax vaccine from CDC if DCLS reports positive culture results for *B. anthracis*
- Ensure delivery of a stock of antibiotics to local health district or designated dispensing site so that initial prophylaxis (5 days) can begin as soon as DCLS has replicated the PCR test using LRN methods
- Coordinate with a joint team from the FBI, USPIS, VDEM, and VSP to ensure the collection of environmental samples from the USPS facility with the positive BDS signal. The team should consider collection of samples from public areas (if appropriate) to determine extent of contamination of public areas and begin efforts to determine if members of the public may have been exposed

- Deliver subsequent supplies of antibiotics (from SNS) to support continued prophylactic treatment of all individuals
- Prepare and assist with distribution of all health-related handouts
- Provide guidance for monitoring health status of exposed USPS employees and potentially exposed
- Coordinate media messages regarding postexposure prophylaxis and recommendations to protect the public's health

DCLS

Post-Event

- Receive BDS cartridge from USPIS and perform PCR, culture, and sensitivity testing, as appropriate, for *B. anthracis*
- Report results to appropriate partners, including VDH
- Perform laboratory testing on environmental and forensic samples as appropriate and report results to partners
- Provide guidance regarding environmental sample collection, if needed

CDC

Pre-Event

Provide guidance and response recommendations for planning purposes

Post-Event

- Provide technical assistance, if requested
- Prepare for vaccine distribution following replication of the positive PCR by DCLS
- Through VDH, offer vaccine to exposed individuals and provide all information needed to provide vaccine through an IND protocol following *B. anthracis* culture confirmation by DCLS

FBI

- Assume Lead Federal Agency responsibility for threats or acts of terrorism. Joint Terrorism Task Force (JTTF) will initiate criminal investigation in cooperation with USPIS, VSP and county/local law enforcement agencies
- FBI WMD Coordinator will coordinate threat assessment/conference call with FBI Headquarters WMD Operations Unit, FBI Hazardous Materials Response Unit, USPIS, VSP, VDH and other state and local agencies
- Deploy FBI Hazardous Materials Response Team (HMRT)
- Develop Forensic Sampling Plan and Field Screening Procedures in coordination with USPIS, VSP, VDH, VDEM and other state and local agencies. Plan will include procedures for reconnaissance entry, sample collection entry and sample decontamination/packaging entry

 Maintain chain of custody and inventory of collected forensic samples. Document potential crime scene with logs, narratives and digital photography

IV. Communications Plan

The primary communication goal of VDH for the response to a BDS alert is to ensure a timely, accurate, honest and consistent flow of information. Communicating effectively is exceptionally important in order to provide the public with information that could potentially impact their health and their reaction to an event. Lack of information breeds fear and fosters hysteria. Therefore, VDH endorses the use of Crisis and Emergency Risk Communication principles for response to events.

VDH recognizes that the initial alert from a BDS system will generate a high volume of media attention. The local health districts along with the post offices and local emergency responders will lead the release of initial information in response to an alert from the BDS system. The VDH Regional Public Information Officers (PIOs) are available at the request of the LHD to assist with the response to a BDS alert. The VDH Public Relations Manager will oversee all public and media relations for the state agency and will coordinate the efforts of Central Office public relations staff.

The Local Health Director or his/her designee will serve as the spokesperson in coordination with other local responders and the post office. The Regional PIOs will provide information to media outlets as requested by the LHD. The VDH State Health Commissioner, Deputy Commissioner for Emergency Preparedness and Response (EP&R), Deputy Commissioner for Public Health and the State Epidemiologist (or his designee) will serve as the principle spokespersons on the state level in regards to BDS as needed.

- The Local Health Districts will notify local media regarding any BDS positive signal and necessary instructions to the public via a press release. (Attachment 12)
- The Local Health District should plan to disseminate information to multiple audiences (e.g., hospitals, physicians, USPS employees and the public) through press conferences, press releases, media interviews, Web sites, hotlines, the Health Alert Network, professional medical organizations and/or other resources. Assistance will be provided by the VDH Regional Team and Central Office
- The VDH Public Relations Manager and/or Regional PIOs can provide translation of materials through a contract with the Northern Virginia Health Education Center. Also, they can coordinate assistance of the CDC Public Response Service Hotline. Expect a delay of 24 48 hours for activation of these services.
- VDH will disseminate/coordinate information with local public health officials through email, conference calls and video conferencing.

Glossary of Terms

AFCS – Advanced Facer-Canceler System

BDS – Biohazard Detection System

CDC – Centers for Disease Control and Prevention

DBCS – Delivery Bar Code Sorter

DCLS – Virginia's Division of Consolidated Laboratory Services

DEQ – Virginia's Department of Environmental Quality (VDEQ)

FBI – Federal Bureau of Investigation

Hazmat – Hazardous Materials Team

HVAC – heating, ventilation and air conditioning units

IND – Investigational New Drug

LRN – Laboratory Response Network

OCR – Optical Character Reader

OEM – Virginia State Police Homeland Security Branch Office of Emergency Management

PCR – Polymerase chain reaction test

PPE – personal protective equipment

USPIS – United States Postal Inspection Service

USPS – United States Postal Service

USPS PDC – United States Postal Service Processing & Distribution Center

VDEM – Virginia Department of Emergency Management

VDH – Virginia Department of Health

VSP – Virginia State Police